

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 7, 13, 19, 25, 32, 39, 40 and 47 in accordance with the following:

1. (CURRENTLY AMENDED) A file processing method comprising:
 - dividing both data and index data into a plurality of sections, wherein the index data is different from and corresponds to the data and is used to search or retrieve the data, where each of the sections comprises the data and the index data, and the data comprises at least one of text data, image data, and audio data;
 - creating a conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency;
 - compressing each of the sections based on the conversion table created therefor using a corresponding one of a plurality of different compression parameters to obtain a compressed file;
 - and
 - storing the compressed file in a storage medium together with address information and compression parameters of the sections after compression.
2. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 1, wherein said compressing uses the plurality of compression parameters based on a distribution of an appearing frequency for each word within said file.
3. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 1, wherein said compressing comprises a flag which indicates non-compressed data in control information of a certain section, if data in the concerned section has a larger amount of information in a form of compressed data than the non-compressed data.

4. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 1, wherein said compressing comprises identification information of the compression parameters in control information of each section.

5. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 1, wherein said compressing adds end information which indicates an end of a section to an end of each section, adds the end information to only a last section when the sections have a fixed length, and comprises a flag indicating that the end information is deleted in the control information of the sections other than the last section.

6. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 1, further comprising:

expanding the compressed file which is read from the storage medium by a driver software which is independent of an application software of a computer.

7. (CURRENTLY AMENDED) A data processing apparatus comprising:
a compressing process section to divide both data and index data into a plurality of sections, and to compress each of the sections based on a conversion table using a corresponding one of a plurality of different compression parameters to obtain a compressed file, after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, wherein the index data is different from and corresponds to the data and is used to search or retrieve the data, where each of the sections comprises the data and the index data, and the data comprises at least one of text data, image data, and audio data; and
a storing process section to store the compressed file in a storage medium together with address information and compression parameters of the sections after compression.

8. (ORIGINAL) The data processing apparatus as claimed in claim 7, wherein said compressing process section uses the plurality of compression parameters based on a distribution of an appearing frequency for each word within said file.

9. (PREVIOUSLY PRESENTED) The data processing apparatus as claimed in claim 7, wherein said compressing process section comprises a flag which indicates non-compressed

data in control information of a certain section, if data in the concerned section has a larger amount of information in a form of compressed data than the non-compressed data.

10. (PREVIOUSLY PRESENTED) The data processing apparatus as claimed in claim 7, wherein said compressing process section comprises identification information of the compression parameters in control information of each section.

11. (PREVIOUSLY PRESENTED) The data processing apparatus as claimed in claim 7, wherein said compressing process section adds end information which indicates an end of a section to an end of each section, adds the end information to only a last section when the sections have a fixed length, and comprises a flag indicating that the end information is deleted in the control information of the sections other than the last section.

12. (PREVIOUSLY PRESENTED) The data processing apparatus as claimed in claim 7, further comprising:

an expanding process section to expand the compressed file which is read from the storage medium by a driver software which is independent of an application software of a computer.

13. (CURRENTLY AMENDED) A storage medium which stores computer-readable information, and stores a program comprising:

compressing process means for causing a computer to divide both data and index data into a corresponding one of a plurality of different sections, and to compress each of the sections based on a conversion table using a plurality of compression parameters to obtain a compressed file, after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, wherein the index data is different from and corresponds to the data and is used to search or retrieve the data, where each of the sections comprises the data and the index data, and the data comprises at least one of text data, image data, and audio data; and

storing process means for causing the computer to store the compressed file in storage means together with address information and compression parameters of the sections after compression.

14. (ORIGINAL) The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to use the plurality of compression parameters based on a distribution of an appearing frequency for each word within said file.

15. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to comprise a flag which indicates non-compressed data in control information of a certain section, if data in the concerned section has a larger amount of information in a form of compressed data than the non-compressed data.

16. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to comprise identification information of the compression parameters in control information of each section.

17. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 13, wherein said compressing process means causes the computer to add end information which indicates an end of a section to an end of each section, add the end information to only a last section when the sections have a fixed length, and comprise a flag indicating that the end information is deleted in the control information of the sections other than the last section.

18. (ORIGINAL) The storage medium as claimed in claim 13, wherein the program further comprising:

expanding process means which causes the computer to expand the compressed file which is read from the storage means by a driver software which is independent of an application software of the computer.

19. (CURRENTLY AMENDED) A storage medium which stores computer-readable information, comprising:

a region storing a compressed file which is divided into a plurality of sections, which are compressed based on a conversion table using a corresponding one of a plurality of different compression parameters, after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency; and

a region storing address information of the sections and the compression parameters thereof, wherein each of the sections comprises both data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data.

20. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 19, wherein said compression parameters are based on a distribution of appearing frequency of an appearing frequency for each word within said compressed file.

21. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 19, wherein a flag which indicates non-compressed data is comprised in control information of a certain section, if data in the concerned section has a larger amount of information in a form of compressed data than the non-compressed data.

22. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 19, wherein identification information of the compression parameters is comprised in control information of each section.

23. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 19, wherein end information which indicates an end of a section is added to an end of each section, the end information is added to only a last section when the sections have a fixed length, and a flag indicating that the end information is deleted is comprised in the control information of the sections other than the last section.

24. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 19, further storing:

a driver software independent of an application software of a computer,
said driver software comprising a program provided with expanding process means for causing the computer to expand the compressed file which is read from the storage medium.

25. (CURRENTLY AMENDED) A file processing method comprising:
a reading step which accesses a storage medium which stores a plurality of different compression parameters, address parameters, and a compressed file, an original file being divided into a plurality of sections and compressed for each section based on a conversion table

using a corresponding one of the plurality of different compression parameters, after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections; and

an expanding step which expands the section data read from the storage medium by said reading step using the compression parameters corresponding to the section data, wherein each of the sections comprises both data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data.

26. (ORIGINAL) The file processing method as claimed in claim 25, wherein the plurality of compression parameters are created based on a distribution of an appearing frequency for each word within said original file.

27. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 25, wherein the compressed file further comprises non-compressed section data of a certain section and a non-compression flag which indicates that the certain section is non-compressed, and said expanding step suppresses expansion of the certain section when the non-compression flag indicates a non-compressed state of the section data of the certain section read from the storage medium by said reading step.

28. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 25, wherein identification information of the compression parameters is comprised in control information of each section.

29. (PREVIOUSLY PRESENTED) The file processing method as claimed in claim 25, wherein a delete flag which indicates that end information indicating an end of each section is not added to the section data is comprised in control information of each section, and said reading step reads the section data by judging a last section based on the delete flag.

30. (ORIGINAL) The file processing method as claimed in claim 25, wherein said expanding step is carried out by a driver software for the storage medium, said driver software being used for making access to the storage medium.

31. (ORIGINAL) The file processing method as claimed in claim 30, wherein the driver software for the storage medium is independent of an application software of the computer.

32. (CURRENTLY AMENDED) A data processing apparatus comprising:
a reading process section to control an access to a storage medium which stores a plurality of different compression parameters, address parameters, and a compressed file, an original file being divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters, after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections; and
an expanding process section to expand the section data read from the storage medium by said reading process section using the compression parameters corresponding to the section data, wherein each of the sections comprises both data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data.

33. (ORIGINAL) The data processing apparatus as claimed in claim 32, wherein the plurality of compression parameters are created based on a distribution of an appearing frequency for each word within said original file.

34. (PREVIOUSLY PRESENTED) The data processing apparatus as claimed in claim 32, wherein the compressed file further comprises non-compressed section data of a certain section and a non-compression flag which indicates that the certain section is non-compressed, and said expanding process section suppresses expansion of the certain section when the non-compression flag indicates a non-compressed state of the section data of the certain section read from the storage medium by said reading process section.

35. (PREVIOUSLY PRESENTED) The data processing apparatus as claimed in claim 32, wherein identification information of the compression parameters is comprised in control information of each section.

36. (ORIGINAL) The data processing apparatus as claimed in claim 32, wherein a delete flag which indicates that end information indicating an end of each section is not added to the section data is comprised in control information of each section, and said reading process section controls reading of the section data by judging a last section based on the delete flag.

37. (ORIGINAL) The data processing apparatus as claimed in claim 32, wherein said expanding process section carries out expansion by a driver software for the storage medium, said driver software being used for making access to the storage medium.

38. (ORIGINAL) The data processing apparatus as claimed in claim 37, wherein the driver software for the storage medium is independent of an application software of the data processing apparatus.

39. (CURRENTLY AMENDED) A data processing apparatus comprising:
a reading process section to control an access to a storage medium which stores a plurality of different compression parameters, address parameters, and a compressed file in response to a read request from an application software, an original file being divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters, after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and the address information corresponding to a plurality of sections; and

an expanding process section to expand the section data read from the storage medium by said reading process section using the compression parameters corresponding to the section data, and to supply expanded data to the application software, wherein each of the sections comprises both data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data.

40. (CURRENTLY AMENDED) A storage medium which stores computer-readable information, and stores a program comprising:

reading process means for causing a computer to control an access to a recording medium which stores a plurality of different compression parameters, address parameters, and a compressed file, an original file being divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters, after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections; and

expanding process means for causing the computer to expand the section data read from the recording medium by said reading process means using the compression parameters corresponding to the section data, wherein each of the sections comprises both data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data.

41. (ORIGINAL) The storage medium as claimed in claim 40, wherein the plurality of compression parameters are created based on a distribution of an appearing frequency for each word within said original file.

42. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 40, wherein the compressed file further comprises non-compressed section data of a certain section and a non-compression flag which indicates that the certain section is non-compressed, and said expanding process means causes the computer to suppress expansion of the certain section when the non-compression flag indicates a non-compressed state of the section data of the certain section read from the recording medium by said reading process section.

43. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 40, wherein identification information of the compression parameters is comprised in control information of each section.

44. (PREVIOUSLY PRESENTED) The storage medium as claimed in claim 40, wherein a delete flag which indicates that end information indicating an end of each section is not added to the section data is comprised in control information of each section, and said reading process means causes the computer to control reading of the section data by judging a last section based on the delete flag.

45. (ORIGINAL) The storage medium as claimed in claim 40, wherein said expanding process means causes the computer to carry out expansion by a driver software for the recording medium, said driver software being used for making access to the recording medium.

46. (ORIGINAL) The recording medium as claimed in claim 45, wherein the driver software for the recording medium is independent of an application software of the computer.

47. (CURRENTLY AMENDED) A storage medium which stores computer-readable information, and stores a program comprising:

reading process means for causing a computer to control an access to a recording medium which stores a plurality of different compression parameters, address parameters, and a compressed file in response to a read request from an application software, an original file being divided into a plurality of sections and compressed for each section based on a conversion table using a corresponding one of the plurality of different compression parameters, after creating the conversion table for each section by selecting a predetermined number of 16-bit codes within the data in an order of appearing frequency, decomposing remaining non-selected 16-bit codes into 8-bit codes, and selecting the 8-bit codes in an order of appearing frequency, so as to obtain a plurality of section data forming the compressed file and address information corresponding to a plurality of sections; and

expanding process means for causing the computer to expand the section data read from the recording medium by said reading process means using the compression parameters corresponding to the section data, and supply expanded data to the application software, wherein each of the sections comprises both data and index data, where the index data is different from and corresponds to the data, and the data comprises at least one of text data, image data, and audio data, and the index data is used to search or retrieve the data.